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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/917,771

07/31/2001

Jan Stoter

2380-339

1177

7590

11/30/2004

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EXAMINER

MUNOZ, GUILLERMO

ART UNIT

PAPER NUMBER

2637

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/917,771

Applicant(s)

STOTER ET AL.

Examiner

Guillermo Munoz

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-18, 23, 25-27, 31-35, 41-47, 52 and 53 is/are rejected.
- 7) ☒ Claim(s) 7-11, 19-22, 28-30, 36-40, 48-51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/16/03/ 01/23/02</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

#### Content of Specification

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

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- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

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- (k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

The disclosure is objected to because of the following informalities:

The Summary of the Invention should be separate from the Background of the Invention.

Appropriate correction is required.

### ***Claim Objections***

The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not). Misnumbered claims 1-23, 25-53 should be renumbered from 1-52 respectively and their dependency should be changed accordingly. However, for purposes of rejection the original numbering will be followed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 12-18, 23, 25-27, 31, 32, 41-47, 52, and 53 are rejected under 35

U.S.C. 102(b) as being anticipated by Goyal, P..

Regarding claim 1; Goyal, P. disclose a method of Automatic Gain Control in Burst Communications Systems which teaches all the claimed subject matter “receiving data blocks...before data in the one data block are amplified in the amplifier” in claim 1 as follows. Goyal, P. teach “some sort of amplitude control is needed over the uplink burst at the base receiver”, note page 36, Col. 1, lines 6-8. Goyal, P. disclose an adaptive gain control technique, wherein the base receiver maintains a record of the RSSI voltage for each uplink slot and stores it in memory, note page 38, Col. 1, lines 46-48. The base station knowing which remote is transmitting next, applies the required control voltage to the VCA just before the burst arrives, note page 38, Col. 2, lines 1-6.

Regarding claim 2, Goyal P. further teach the claimed subject matter, note page 36, Col. 1, line 48.

Regarding claim 3, Goyal P. further teach the claimed subject matter “increasing the speed...at a beginning of the time period” by the function of the integrator output ramping up/down to compensate for input amplitude changes, note page 42, Col. 1, lines 36-45.

Regarding claim 12, Goyal P. further teach the claimed subject matter, note page 38, Col. 1, line 46—Col. 2, line 6.

Regarding claim 13, Goyal P. further teach the claimed subject matter, note page 38, Col. 1, lines 46-48.

Regarding claim 14, see claim 13.

Regarding claim 15, see claim 13.

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Regarding claim 16, Goyal P. further teach the claimed subject matter, note page 38, Col. 2, lines 18-20.

Regarding claim 17, Goyal P. further teach the claimed subject matter, note page 38, Col. 2, lines 22-25.

Regarding claim 18, see claim 14.

Regarding claim 23, Goyal, P. further teach the claimed subject matter, note page 36, Col. 3, lines 43-47.

Regarding claim 25, see claim 1.

Regarding claim 26, see claim 2.

Regarding claim 27, Goyal, P. further teach the claimed subject matter, note page 38, Col. 2, lines 6 and 31.

Regarding claim 31, see claim 2.

Regarding claim 32, see claim 3.

Regarding claim 41, see claim 12.

Regarding claim 42, see claim 13.

Regarding claim 43, see claim 14.

Regarding claim 44, see claim 15.

Regarding claim 45, see claim 16.

Regarding claim 46, see claim 17.

Regarding claim 47, see claim 18.

Regarding claim 52, see claim 23.

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Regarding claim 53, Goyal P. further teach the claimed subject matter, note page 36, Col. 1, lines 20-23.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goyal, P. in view of Piirainen et al..

Regarding claim 4; as applied to claim 3, Goyal P. teach an AGC circuit having the gain step adjusted depending upon the input signal amplitude. Goyal P. teach variation of variations in gain settle after a small fraction of time determined by transient response. However, Goyal P. does not explicitly state that the speed increase is relative to the time period.

Piirainen et al. teach a similar AGC circuit for a TDMA base station, wherein the gain of the AGC gain is set to a predetermined maximum value at the beginning of the time slot and set to a predetermined minimum during the time slot, note paragraphs 0014 and 0015.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify Goyal P.'s gain controller with Piirainen et al.'s teaching of having an increased gain step at the beginning of the time slot and a reduced gain during the actual slot,



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since Piirainen et al. suggest in paragraph 0008 the result would improve channel filter operations.

Regarding claim 5, see claim 4.

Regarding claim 6, Piirainen et al. further teach the claimed subject matter, note paragraphs 0014 and 0015.

Regarding claim 33, see claim 4.

Regarding claim 34, see claim 5.

Regarding claim 35, see claim 6.

#### ***Allowable Subject Matter***

Claims 7-11, 19-22, 36-40, and 48-51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 7-11, 19-22, 28-30, 36-40, and 48-51 are indicated as allowable.

The following is an examiner's statement of reasons for allowance:

Claims 7-11, 28-30, and 36-40 are indicated as allowable because the claimed invention comprises an AGC circuit for adjusting the gain at a speed depending on the difference of the amplifier output signal level and the target signal level. The closest prior art, Piirainen et al. (US Patent Number 2004/0014441) teach a similar circuit including an AGC circuit for adjusting the speed of the AGC, however, Piirainen et al. fails to teach adjusting the speed of the AGC

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depending on the difference of the amplifier output signal level and the target signal level. This distinct feature has been included in dependent claims 7, 28, 36, and 37, rendering them allowable. Claims 8-11, 29-30, and 38-40 are depend on dependent claims 7, 28, and 37, respectively, and are thereby allowable.

Claims 19-22 and 48-51 are indicated as allowable because the claimed invention comprises an AGC circuit that uses a transmit power sequence for predicting a preset value presetting the gain for the amplifier for a block using the predicted preset value. The closest prior art, Piirainen (US Patent Number 2004/0014441) teach a similar circuit including an AGC circuit having the gain changed during a guard period and/or during an increase of the signal along a rising ramp, however, Piirainen fails to teach using a ramp up of signal at the beginning of a block to predict a preset value used for presetting the gain for the amplifier. This distinct feature has been included in dependent claims 19 and 48-51, , rendering them allowable. Claims 20-22 are depend on dependent claim 19, and are thereby allowable.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

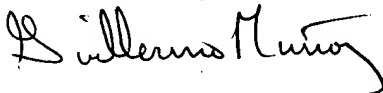
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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Munoz whose telephone number is 571-272-3045. The examiner can normally be reached on Monday-Friday 8:30a.m-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-2988. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



GM  
November 22, 2004



JEAN B. CORRIELLUS  
PRIMARY EXAMINER

11-26-04